

Dsk2 Antibody (N-term) Blocking Peptide Synthetic peptide Catalog # BP2175a

## Specification

# Dsk2 Antibody (N-term) Blocking Peptide - Product Information

Primary Accession

<u>Q9UHD9</u>

# Dsk2 Antibody (N-term) Blocking Peptide - Additional Information

Gene ID 29978

**Other Names** Ubiquilin-2, Chap1, DSK2 homolog, Protein linking IAP with cytoskeleton 2, PLIC-2, hPLIC-2, Ubiquitin-like product Chap1/Dsk2, UBQLN2, N4BP4, PLIC2

#### Target/Specificity

The synthetic peptide sequence used to generate the antibody <a href=/product/products/AP2175a>AP2175a</a> was selected from the N-term region of human Dsk2 . A 10 to 100 fold molar excess to antibody is recommended. Precise conditions should be optimized for a particular assay.

Format

Peptides are lyophilized in a solid powder format. Peptides can be reconstituted in solution using the appropriate buffer as needed.

#### **Storage** Maintain refrigerated at 2-8°C for up to 6 months. For long term storage store at -20°C.

**Precautions** This product is for research use only. Not for use in diagnostic or therapeutic procedures.

## Dsk2 Antibody (N-term) Blocking Peptide - Protein Information

Name UBQLN2

Synonyms N4BP4, PLIC2

#### Function

Plays an important role in the regulation of different protein degradation mechanisms and pathways including ubiquitin- proteasome system (UPS), autophagy and the endoplasmic reticulum- associated protein degradation (ERAD) pathway. Mediates the proteasomal targeting of misfolded or accumulated proteins for degradation by binding (via UBA domain) to their polyubiquitin chains and by interacting (via ubiquitin-like domain) with the subunits of the proteasome (PubMed:<a href="http://www.uniprot.org/citations/10983987" target="\_blank">10983987</a>). Plays a role in the ERAD pathway via its interaction with ER-localized proteins FAF2/UBXD8 and HERPUD1 and may form a link between the polyubiquitinated ERAD substrates and the proteasome (PubMed:<a



href="http://www.uniprot.org/citations/18307982" target="\_blank">18307982</a>, PubMed:<a href="http://www.uniprot.org/citations/24215460" target="\_blank">24215460</a>). Involved in the regulation of macroautophagy and autophagosome formation; required for maturation of autophagy-related protein LC3 from the cytosolic form LC3-I to the membrane-bound form LC3-II and may assist in the maturation of autophagosomes to autolysosomes by mediating autophagosome-lysosome fusion (PubMed:<a href="http://www.uniprot.org/citations/19148225" target="\_blank">19148225</a>, PubMed:<a href="http://www.uniprot.org/citations/19148225" target="\_blank">20529957</a>). Negatively regulates the endocytosis of GPCR receptors: AVPR2 and ADRB2, by specifically reducing the rate at which receptor-arrestin complexes concentrate in clathrin-coated pits (CCPs) (PubMed:<a href="http://www.uniprot.org/citations/18199683" target="\_blank">18199683</a>).

### **Cellular Location**

Cytoplasm. Nucleus. Membrane {ECO:0000250|UniProtKB:Q9QZM0} Cytoplasmic vesicle, autophagosome Note=Colocalizes with a subset of proteasomes, namely those that are cytoskeleton associated or free in the cytosol. Associated with fibers in mitotic cells.

# **Dsk2 Antibody (N-term) Blocking Peptide - Protocols**

Provided below are standard protocols that you may find useful for product applications.

### <u>Blocking Peptides</u>

# Dsk2 Antibody (N-term) Blocking Peptide - Images

## Dsk2 Antibody (N-term) Blocking Peptide - Background

Dsk2 increases the half-life of proteins destined to be degraded by the proteasome, and may modulate proteasome-mediated protein degradation. The Dsk2 protein binds UBE3A and BTRC, and interacts with the 19S proteasome subunit. In the cytoplasm, Dsk2 colocalizes with the proteasome; it is also associated with fibers in mitotic cells in the nucleus. Dsk2 is highly expressed in mitotic cells from metaphase to telophase, while expression in non-mitotic cells is very low.

## Dsk2 Antibody (N-term) Blocking Peptide - References

Walters, K.J., et al., Biochemistry 41(6):1767-1777 (2002).Kleijnen, M.F., et al., Mol. Cell 6(2):409-419 (2000).Ueki, N., et al., Nat. Biotechnol. 16(13):1338-1342 (1998).